

Outgoing
C0150032
OK

OGMCOAL - Silica and acidity

From: Kevin Lundmark
To: Dana Marrelli
Date: 4/5/2010 12:54 PM
Subject: Silica and acidity
CC: OGMCOAL; Steve Christensen

Dana,

This morning we spoke about the whole-water analysis of the mine drainage samples and 1) whether it is necessary to use method SM2310B(4a) for the acidity analysis, and 2) whether silica analysis is necessary. Horizon Laboratories in Price reportedly cannot perform these analyses.

I reviewed the methods for acidity in Standard Methods for the Examination of Water and Wastewater, and confirmed that acidity method with hot peroxide pretreatment, SM 2310 B (4a), is required when samples are known or suspected to contain hydrolyzable metals. Given the presence and concern over iron in the mine discharge water, the hot peroxide treatment (4a) is warranted.

With respect to silica - considering that this analysis is an attempt to characterize the whole-water chemistry of the mine discharge, (dissolved) silica should be included on the list of parameters. Omission of silica would result in a data gap which would likely surface in the future, so it would be prudent to perform this analysis concurrently.

Please let me know if you have any other questions.

Thanks,
Kevin

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